Michigan State Industries

SAFETY DATA SHEET

MSI-8794 – Non-Phosphate Power Capsule **Date: 2/8/2019**

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Non-Phosphate Power Capsule

Other Means of Identification

Product Code 8794

Recommended Use of the Chemical and Restrictions on Use
Recommended Use Machine Dishwashing for use with injector fed systems

Details of the Supplier of the Safety Data Sheet
Manufactured for Address Michigan State Industries
17600 Ryan Rd.
Detroit, MI. 48212

Emergency Telephone Number
Company Phone Number 313-368-3200
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Skin Corrosion/Irritation	Category 1 Sub-category B
Serious Eye Damage/Eye Irritation	Category 1

Signal Word **DANGER**

Hazard Statements Causes severe skin burns and eye damage.
May cause respiratory irritation
Harmful if swallowed

Appearance: White powder **Physical State:** Solid **Odor:** Chlorine Odor

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray. Do not ingest.
Wash face, hands, and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements – Response
Immediately call a POISON Center or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.
IF ON SKIN: Remove contaminated clothing immediately. Flush with water for at least 15 minutes. Seek medical attention if irritation occurs. Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention if irritation occurs.
IF SWALLOWED: Rinse mouth. Immediately call local poison control center or physician for treatment advice.

Precautionary Statements - Storage
Store locked up, in an area inaccessible to children. Store in a cool, dry area.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium Carbonate	497-19-8	45 - 55
Sodium Hydroxide	1310-73-2	10 - 25
Sodium Metasilicate	6834-92-0	10 – 20
Sodium dichloroisocyanurate dihydrate	51580-86-0	0 - 5

4. FIRST AID MEASURES

First Aid Measures

Inhalation — Remove person to fresh air. If breathing is difficult, have a trained person administer oxygen. If respiration stops, administer mouth-to-mouth resuscitation, get medical attention immediately.

Eye Contact — Immediately flush with large amounts of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. Get medical attention.

Ingestion — Never give anything by mouth to an unconscious person. DO NOT induce vomiting. Give large quantities of water, if available give several glasses of milk. If vomiting occurs spontaneously, keep airway clear. Seek medical attention immediately.

Skin Contact — Immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear, which cannot be decontaminated. Get medical attention immediately.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms — The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Flood with water.

Unsuitable Extinguishing Media ABC fire extinguishers, carbon dioxide, dry chemicals.

Hazardous Combustion Products:
Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.

Protective Equipment and Precautions for Firefighters
When any material is involved in a fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear appropriate protective clothing.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage, if safe to do so. Do not add water to spilled material.

Methods for Cleaning Up SMALL SPILLS: do not add water to spilled material. Isolate spill; sweep up and collect for disposal. Damp material should be neutralized to a non-oxidizing state. LARGE SPILLS: Isolate spill; keep material dry and collect for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Do not breathe dust/fume/gas/mist/vapors/spray. Wear appropriate personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Never add water to this product. Always add product to large quantities of water. Do not add this product to any dispensing device containing residuals of other products.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions KEEP OUT OF REACH OF CHILDREN. Keep containers tightly closed in a cool, well-ventilated place. Store locked up.

Incompatible Materials Acids, ammonia, bases. Contact with some metals; particularly magnesium, aluminum and zinc (galvanized) can rapidly generate hydrogen which is explosive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Hydroxide	2 mg/m^3	2mg/m^3	2mg/m^3

Appropriate Engineering Controls

Engineering Controls Good general ventilation should be sufficient for most conditions.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Safety glasses Wear face shield if splashing can occur.

Skin and Body Protection Wear protective gloves and protective clothing. Rubber or PVC.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Solid		
Appearance	White Powder	**Odor**	Chlorine odor
Color	White	**Odor Threshold**	N/A

Property	**Values**	**Remarks • Method**
pH in 1% solution	13	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	Not applicable	
Water Solubility	Completely soluble	

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.
Will react with incompatible materials. Contact with some metals; particularly magnesium, aluminum and zinc (galvanized) can rapidly generate hydrogen which is explosive.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Incompatible materials.

Incompatible Materials
Acids. Sodium hydroxide is corrosive to tin, aluminum, zinc and alloys containing these metals.

Hazardous Decomposition Products
Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause irritation to the mucous membranes and upper respiratory tract.

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns. May be harmful in contact with skin.

Ingestion May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Carbonate 497-19-8	2800 mg/kg (Rat)	>2000 mg/k (Rabbit)	2.30 mg/l (Rat)
Sodium Metasilicate 6834-92-0	1152 – 1349 mg/kg (Rat)	>5000 mg/kg (Rat)-	>2.06 g/m^3 (Rat)

Information on Physical, Chemical and Toxicological Effects

Symptoms The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity No components of this product have been classified as a carcinogen by NTP, IARC or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Hydroxide 1310-73-2		96 h 0.22 mg/L LC50 (rainbow trout) 96 h 0.28 mg/L LC50 (bluegill sunfish)		

Persistence and Degradability
This product is biodegradable.

Bioaccumulation
Not determined.

Mobility
Not determined.

Other Adverse Effects
Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1823
Proper Shipping Name	Corrosive solids, n.o.s., (Sodium hydroxide, mixture)
Hazard Class	8
Packing Group	III
Additional Information	Limited Quantity, DOT Label/Placard Exemption §173.154 applies

IATA

UN/ID No	UN1823
Proper Shipping Name	Corrosive solids, n.o.s. (Sodium hydroxide, mixture)
Hazard Class	8
Packing Group	III

IMDG

UN/ID No	UN1823
Proper Shipping Name	Corrosive solids, n.o.s. (Sodium hydroxide, mixture)
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

US Federal Regulations

CERCLA Reportable Quantity The following components are listed:

Chemical Name	CAS Number	CERCLA RQ
Sodium Hydroxide	1310-73-2	1000 lbs.

SARA 313 No chemical (s) components of this product are subject to reporting levels established by SARA Title III, Section 313.

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide	X	X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Reactivity**	**Special Hazards**
	2	0	1	Not determined
HMIS	**Health Hazards**	**Flammability**	**Reactivity**	**Personal Protection**
	2	0	1	B

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet